

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 February 2004 (12.02.2004)

PCT

(10) International Publication Number
WO 2004/013654 A1

(51) International Patent Classification⁷: G01S 17/10,
G02B 23/12, G01S 17/93

(21) International Application Number:
PCT/IL2003/000639

(22) International Filing Date: 5 August 2003 (05.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/400,707 5 August 2002 (05.08.2002) US

(71) Applicant (for all designated States except US): ELBIT
SYSTEMS LTD. [IL/IL]; c/o Elop Electrooptics Industries
Ltd., P.O.Box 1165, 76111 Rehovot (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DAVID, Ofer
[IL/IL]; 4 Vitkin Street, 34756 Haifa (IL). BOREN-
STEIN, Yehuda [IL/IL]; 36/1 Henrieta Szold Street,
34722 Haifa (IL).

(74) Agents: EITAN, PEARL, LATZER & CO-
HEN-ZEDEK et al.; 2 Gav Yam Center, 7 Shenkar
Street, 46725 Herzlia (IL).

(81) Designated States (national): AE, AG, AL, AM, AI, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

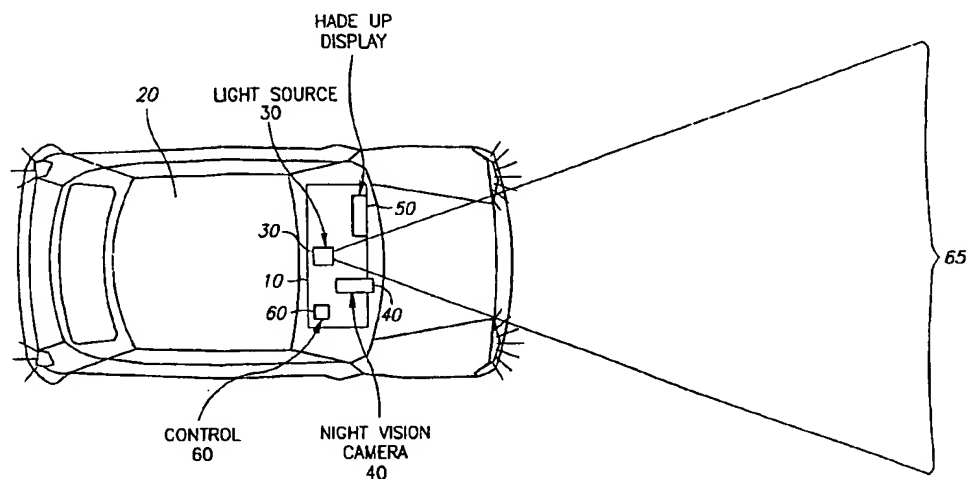
Published:

— with international search report

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: VEHICLE MOUNTED NIGHT VISION IMAGING SYSTEM AND METHOD



(57) Abstract: A vehicle mounted imaging system and method, enabling selective imaging of objects in a low-visibility environment. The system includes a light source (30) providing non-visible light pulses and a camera (40) having an image intensifier enabled to gate selected received images. The light source may be a laser generator, which may be enabled to generate a pulse width related to the depth of a field to be imaged. The gated image intensifier may determine gating time spans according to the depth of a field to be imaged.

WO 2004/013654 A1